REMARKS

Claims 1-33 are pending in the present application, and new claim 34 has been added by this amendment. The Examiner has rejected claims 1-3, 11, 12, 14-16 and 24-26. The Examiner has objected to claims 4-10, 13, 17-23 and 27-33. Claim 11 has been amended by the present Amendment, and claims 12 and 23 have been amended by the present Amendment to correct clerical errors. The specification has also been amended by the present Amendment to correct a clerical error. No new matter has been added by these amendments. All the pending claims comply with all the requirements of 35 U.S.C. Accordingly, Applicants request examination and allowance of all claims.

Rejection under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-3, 11, 12, 14-16 and 24-26 under 35 U.S.C. § 103(a) as being unpatentable over UK Patent Application GB2301513A to Takeda (hereinafter "Takeda").

The Examiner asserts that "Takeda rendered obvious claim 1 by teaching the claimed partitioning (sic) a screen of the display monitor into a plurality of display blocks having one or more layers of pixels, at figure 1; storing in a z-range buffer minimum and maximum depth values for the layers in the block, at figure 1, the ZR buffer, comparing a depth value of the polygon with a depth value of a particular layer in the block stored in the z-range buffer; and identifying visible pixels in the block making up the polygon based on the comparison, at the abstract."

The Examiner further states that "[w]hile Takeda teaches most features claimed, as outlined above it is noted that the z-range buffer further storing a bitmask value, each bit in the bitmask value associating a pixel in the block to a layer in the block, is not explicitly taught. However, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to consider the main z-buffer, at figure 1, as storing a bitmask value because the value associates a pixel to a depth layer, just as the main z-buffer does."

Applicants respectfully traverse these rejections. Only one reference, Takeda, has been cited. As the Examiner has correctly stated, Takeda does not teach a z-range buffer storing a bitmask value, each bit in the bitmask value associating a pixel in the block to a layer in the block.

In order for the rejection to be proper, all of the elements of the rejected claim must appear within the cited references, and there must be a teaching or suggestion to combine or modify these references. However, all of the elements of claim 1 do not appear in the cited reference, Takeda. Furthermore, applicants are unaware of any teaching or suggestion in the cited art to combine or modify Takeda to include these elements.

Consequently, claim 11 has been amended to recite "the z-range buffer further storing a bitmask value, each bit in the bitmask value associating a pixel in the block to a layer in the block." Accordingly, claims 1-33 are allowable over Takeda.

The Examiner further states that "[c]laims 14-16 and 24-26 are similar to claims 1-3, respectively, and are rejected under similar rationale." Therefore, since claim 1 has

been shown herein to be allowable, claims 14-16 and 24-26 are also allowable for the same reasons that claim 1 is allowable.

Objections to claims

The Examiner has objected to claims 4-10, 13, 17-23 and 27-33 as being dependent upon a rejected base claim. However, since the rejected base claims have been shown herein to be allowable, claims 4-10, 13, 17-23 and 27-33 are therefore also allowable.

Applicants thank the Examiner for the indication of allowance of claims 4-10, 13, 17-23, 27-33, if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Accordingly, new claim 34 has been added that corresponds to claims 1 and 4.

Attached hereto is an appendix entitled "VERSION WITH MARKINGS TO SHOW CHANGES MADE," which is a marked-up version of the changes made to the present application by the current amendment.

The Examiner is respectfully requested to enter this Amendment and to examine the pending claims. The Examiner is respectfully urged to consider the claimed invention at the earliest time possible and issue a favorable action indicating the application is in condition for allowance. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone Applicant's undersigned representative at the number given below.

Respectfully submitted,

Hong et al.

Date: 2/4/02 By: Breton G. Graham

Breton G. Graham, Reg. No. 48,149
Carr & Ferrell LLP
2225 East Bayshore Road, Suite 200
Palo Alto, CA 94303
Phone: (650) 812-3400
Fax: (650) 812-3444